

Amendments to the Claims:

Please cancel Claims 3-4 and 24 without prejudice or disclaimer; amend Claims 1-2, 5-7, 9, 11-14, 16-19, 25, 27, 33, 35 and 37; and add new Claim 41 as set forth below.

1. (Currently amended) A method of treating a melanin-containing tumor in a subject which comprises administering to the subject an amount of a radiolabeled antibody effective to treat the tumor, where the radiolabeled antibody binds to melanin ~~a cellular component~~ released by a dying tumor cell and where the amount effective to treat the melanin-containing tumor is a dose of 1-1000 mCi.
2. (Currently amended) A method of imaging a melanin-containing tumor in a subject which comprises administering to the subject an amount of a radiolabeled antibody effective to image the tumor, where the radiolabeled antibody binds to melanin ~~a cellular component~~ released by a dying tumor cell.
- 3-4. (Canceled)
5. (Currently amended) A method for treating a melanin-containing melanoma in a subject which comprises administering to the subject an amount of a radiolabeled anti-melanin monoclonal antibody effective to treat the melanoma.
6. (Currently amended) A method for imaging a melanin-containing melanoma in a subject which comprises administering to the subject an amount of a radiolabeled anti-melanin monoclonal antibody effective to image the melanoma.
7. (Currently amended) The method of claim 1 or 5 wherein the antibody is labeled with an alpha-emitting radioisotope.

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8. (Original) The method of claim 7 wherein the alpha-emitting radioisotope is 213-Bismuth.
9. (Currently amended) The method of claim 1 or 5 wherein the antibody is labeled with a beta-emitting radioisotope.
10. (Original) The method of claim 9 wherein the beta-emitting radioisotope is 188-Rhenium.
11. (Currently amended) The method of claim 1 or 5 wherein the antibody is labeled with a radioisotope selected from the group consisting of a positron emitter and an admixture of any of an alpha emitter, a beta emitter, and a positron emitter.
12. (Currently amended) The method of claim 2 or 6 wherein the antibody is labeled with a radioisotope selected from the group consisting of a beta emitter, a positron emitter, and an admixture of a beta emitter and a positron emitter.
13. (Currently amended) The method of claim 2 or 6 wherein the antibody is labeled with a radioisotope selected from the group consisting of 99m-Technetium, 111-Indium, 67-Gallium, 123-Iodine, 124-Iodine, 131-Iodine and 18-Fluorine.
14. (Currently amended) The method of claim 1, 2, 5 or 6 wherein the subject is a mammal.
15. (Original) The method of claim 14 wherein the mammal is a human.
16. (Currently amended) The method of claim 5 wherein the amount effective to treat the melanoma is a dose of ~~the radioisotope is between~~ 1-1000 mCi.

17. (Currently amended) The method of claim 1 or 2, 5 wherein the antibody is a monoclonal antibody.
18. (Currently amended) The method of claim 1, 2, 5 or 6, wherein the antibody is a F(ab')₂ fragment or a Fab' fragment of a whole antibody.
19. (Currently amended) The method of claim 1, 2, 5 or 6, wherein the antibody is an IgM antibody, an IgG antibody, or an IgA antibody.
- 20-24. (Canceled)
25. (Currently amended) The method of claim 1, 2, 5 or 6, wherein uptake of radiolabeled antibody by the kidney is inhibited by administering a positively charged amino acid to the subject.
26. (Original) The method of claim 25, wherein the amino acid is D-lysine.
27. (Currently amended) The method of claim 1 or 5 which further comprises administering to the subject an amount of antibodies radiolabeled with a plurality of different radioisotopes.
28. (Original) The method of claim 27, wherein the radioisotopes are isotopes of a plurality of different elements.
29. (Original) The method of claim 27, wherein at least one radioisotope is a long range emitter and at least one radioisotope is a short range emitter.

30. (Original) The method of claim 29, wherein the long-range emitter is a beta emitter and the short range emitter is an alpha emitter.
31. (Original) The method of claim 30, wherein the beta emitter is 188-Rhenium and the alpha emitter is 213-Bismuth.
32. (Original) The method of claim 27, wherein the plurality of different radioisotopes is more effective in treating the tumor than a single radioisotope within the plurality of different radioisotopes, where the radiation dose of the single radioisotope is the same as the combined radiation dose of the plurality of different radioisotopes.
33. (Currently amended) The method of claim 5 or 6 wherein uptake of radiolabeled anti-melanin monoclonal antibody in the melanoma is at least 10 times greater than in surrounding muscle.
34. (Canceled)
35. (Currently amended) The method of claim 5 or 6 wherein the radiolabeled anti-melanin monoclonal antibody is not taken up by non-cancerous melanin-containing tissue.
36. (Original) The method of claim 35, wherein the non-cancerous melanin-containing tissue is hair, eyes, skin, brain, spinal cord, and/or peripheral neurons.
37. (Currently amended) The method of claim 1 or 5, which comprises multiple administrations of the radiolabeled antibody to the subject.

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38-40. (Canceled)

41. (New) The method of claim 5 or 6, wherein where the radiolabeled anti-melanin monoclonal antibody binds to melanin released by a dying melanoma cell.